

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptaul53cxa

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks  
(ROSPATENT) added to list of core patent offices covered  
NEWS 4 FEB 28 PATDPAFULL - New display fields provide for legal status  
data from INPADOC  
NEWS 5 FEB 28 BABS - Current-awareness alerts (SDIs) available  
NEWS 6 FEB 28 MEDLINE/LMEDLINE reloaded  
NEWS 7 MAR 02 GBFULL: New full-text patent database on STN  
NEWS 8 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced  
NEWS 9 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 10 MAR 22 KOREAPAT now updated monthly; patent information enhanced  
NEWS 11 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY  
NEWS 12 MAR 22 PATDPASPC - New patent database available  
NEWS 13 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags  
  
NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005  
  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that  
specific topic.

All use of STN is subject to the provisions of the STN Customer  
agreement. Please note that this agreement limits use to scientific  
research. Use for software development or design or implementation  
of commercial gateways or other similar uses is prohibited and may  
result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 14:30:03 ON 01 APR 2005

|  |            |         |
|--|------------|---------|
| => file caplus uspatfull japio efull medline biosis embase scisearch |            |         |
| COST IN U.S. DOLLARS   | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
| FULL ESTIMATED COST  | 0.84       | 0.84    |

FILE 'CAPLUS' ENTERED AT 14:32:21 ON 01 APR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 14:32:21 ON 01 APR 2005  
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'JAPIO' ENTERED AT 14:32:21 ON 01 APR 2005  
COPYRIGHT (C) 2005 Japanese Patent Office (JPO)- JAPIO

FILE 'EPFULL' ENTERED AT 14:32:21 ON 01 APR 2005  
COPYRIGHT (C) 2005 European Patent Office / FIZ Karlsruhe

FILE 'MEDLINE' ENTERED AT 14:32:21 ON 01 APR 2005

FILE 'BIOSIS' ENTERED AT 14:32:21 ON 01 APR 2005  
Copyright (c) 2005 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 14:32:21 ON 01 APR 2005  
COPYRIGHT (C) 2005 Elsevier Inc. All rights reserved.

FILE 'SCISEARCH' ENTERED AT 14:32:21 ON 01 APR 2005  
Copyright (c) 2005 The Thomson Corporation

=> s (autologous fibroblast#)  
L1 820 (AUTOLOGOUS FIBROBLAST#)

=> s l1 and cultur?  
L2 555 L1 AND CULTUR?

=> s l2 and (wound or fistula or ulcer or fistula) and heal?  
L3 83 L2 AND (WOUND OR FISTULA OR ULCER OR FISTULA) AND HEAL?

=> s l3 and epithelial?  
L4 46 L3 AND EPITHELIAL?

=> l4 and inject?  
L4 IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter  
"HELP COMMANDS" at an arrow prompt (=>).

=> s l4 and inject?  
L5 30 L4 AND INJECT?

=> s l5 and ((non immunogen?) or nonimmunogen?)  
L6 2 L5 AND ((NON IMMUNOGEN?) OR NONIMMUNOGEN?)

=> d l6 1-2 ibib abs

L6 ANSWER 1 OF 2 USPATFULL on STN  
ACCESSION NUMBER: 2004:171982 USPATFULL  
TITLE: Targeted glycosaminoglycan polymers by polymer grafting  
and methods of making and using same  
INVENTOR(S): DeAngelis, Paul L., Edmond, OK, UNITED STATES  
Jing, Wei, Edmond, OK, UNITED STATES

|                       | NUMBER  | KIND | DATE          |
|-----------------------|---|------|---------------|
| PATENT INFORMATION:   | US 2004132143   | A1   | 20040708      |
| APPLICATION INFO.:    | US 2003-642248  | A1   | 20030815 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2002-195908, filed<br>on 15 Jul 2002, PENDING Continuation-in-part of Ser.<br>No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat.<br>No. US 6444447 Continuation-in-part of Ser. No. US |      |               |

1999-283402, filed on 1 Apr 1999, ABANDONED  
Continuation-in-part of Ser. No. US 2001-842484, filed  
on 25 Apr 2001, PENDING Continuation-in-part of Ser.  
No. US 2002-142143, filed on 8 May 2002, PENDING

|                       | NUMBER  | DATE          |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2002-404356P   | 20020816 (60) |
|                       | US 2003-479432P   | 20030618 (60) |
|                       | US 1998-107929P   | 19981111 (60) |
|                       | US 1998-80414P  | 19980402 (60) |
|                       | US 2000-199538P   | 20000425 (60) |
|                       | US 2001-289554P   | 20010508 (60) |
| DOCUMENT TYPE:        | Utility   |               |
| FILE SEGMENT:         | APPLICATION   |               |
| LEGAL REPRESENTATIVE: | DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113 |               |
| NUMBER OF CLAIMS:     | 111   |               |
| EXEMPLARY CLAIM:      | 1   |               |
| NUMBER OF DRAWINGS:   | 41 Drawing Page(s)  |               |
| LINE COUNT:           | 8221  |               |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate or chondroitin or heparin/heparosan synthases from Pasteurella, in order to create a variety of glycosaminoglycan oligosaccharides having a natural or chimeric or hybrid sugar structure with a targeted size that are substantially monodisperse in size.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 2 OF 2 USPATFULL on STN

ACCESSION NUMBER: 2004:24342 USPATFULL  
TITLE: Bioadhesive directed somatic cell therapy  
INVENTOR(S): Song, Sun Uk, Inchon, KOREA, REPUBLIC OF  
Yi, Youngsuk, Gaithersburg, MD, UNITED STATES  
Lee, Kwan Hee, Gaithersburg, MD, UNITED STATES  
Noh, Moon Jong, Gaithersburg, MD, UNITED STATES

|                     | NUMBER         | KIND | DATE          |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2004018179  | A1   | 20040129      |
| APPLICATION INFO.:  | US 2003-382190 | A1   | 20030305 (10) |

|                       | NUMBER  | DATE          |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2002-369111P                                   | 20020329 (60) |
| DOCUMENT TYPE:        | Utility   |               |
| FILE SEGMENT:         | APPLICATION                                       |               |
| LEGAL REPRESENTATIVE: | JHK Law, P.O. Box 1078, La Canada, CA, 91012-1078 |               |
| NUMBER OF CLAIMS:     | 40  |               |
| EXEMPLARY CLAIM:      | 1   |               |
| NUMBER OF DRAWINGS:   | 17 Drawing Page(s)                                |               |
| LINE COUNT:           | 1566  |               |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention is related to a cell-mediated gene therapy treatment using a cell composition that includes bioadhesive material. The bioadhesive material allows targeted and localized delivery of therapeutic somatic cells to the site of interest.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 14:30:03 ON 01 APR 2005)

FILE 'CAPLUS, USPATFULL, JAPIQ, EPFULL, MEDLINE, BIOSIS, EMBASE, SCISEARCH' ENTERED AT 14:32:21 ON 01 APR 2005

L1 820 S (AUTOLOGOUS FIBROBLAST#)  
L2 555 S L1 AND CULTUR?  
L3 83 S L2 AND (WOUND OR FISTULA OR ULCER OR FISTULA) AND HEAL?  
L4 46 S L3 AND EPITHELIAL?  
L5 30 S L4 AND INJECT?  
L6 2 S L5 AND ((NON IMMUNOGEN?) OR NONIMMUNOGEN?)

=> d 15 1-30 ibib abs

L5 ANSWER 1 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2004:242059 USPATFULL  
TITLE: Gene therapy using TGF- $\beta$   
INVENTOR(S): Noh, Moon Jong, Kyunggi-Do, KOREA, REPUBLIC OF  
Kang, Kyoung Ae, Kyunggi-Do, KOREA, REPUBLIC OF  
Lee, Kwan Hee, Seoul, KOREA, REPUBLIC OF  
PATENT ASSIGNEE(S): Tissuegene, Inc., Gaithersburg, MD, United States (U.S. corporation)

|                       | NUMBER   | KIND | DATE         |
|-----------------------|--|------|--------------|
| PATENT INFORMATION:   | US 6797703   | B1   | 20040928     |
| APPLICATION INFO.:    | US 2000-702718   |      | 20001101 (9) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1999-345415, filed on 30 Jun 1999, now patented, Pat. No. US 6315992 |      |              |
| DOCUMENT TYPE:        | Utility  |      |              |
| FILE SEGMENT:         | GRANTED  |      |              |
| PRIMARY EXAMINER:     | Wilson, Michael C.   |      |              |
| LEGAL REPRESENTATIVE: | JHK Law, Kim, Joseph Hyosuk  |      |              |
| NUMBER OF CLAIMS:     | 11   |      |              |
| EXEMPLARY CLAIM:      | 1  |      |              |
| NUMBER OF DRAWINGS:   | 12 Drawing Figure(s); 12 Drawing Page(s)   |      |              |
| LINE COUNT:           | 1094   |      |              |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention is related to a cell-mediated gene therapy treatment for orthopedic disease using a member belonging to the transforming growth factory- $\beta$  (TGF- $\beta$ ) superfamily. TGF- $\beta$  gene therapy as a new treatment method for degenerative arthritis is demonstrated. After transfection of TGF- $\beta$  cDNA expression vectors into fibroblasts (NIH 3T3-TGF- $\beta$ 1), the cells were **injected** into rabbit achilles tendon and knee joints with artificially-made cartilage defects. Intratendinous **injections** were performed to determine the optimal concentration for in vivo expression. Partially defected cartilage model was made to simulate degenerative arthritis of the knee joint. The partial cartilage defect treated with the cell-mediated gene therapy procedure was covered by newly formed hyaline cartilage which indicates that the cells survived and stimulated matrix formation in this area. Completely denuded cartilage areas were covered by fibrous collagen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 2 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2004:171982 USPATFULL  
TITLE: Targeted glycosaminoglycan polymers by polymer grafting and methods of making and using same  
INVENTOR(S): DeAngelis, Paul L., Edmond, OK, UNITED STATES  
Jing, Wei, Edmond, OK, UNITED STATES

|                       | NUMBER  | KIND | DATE          |
|-----------------------|---|------|---------------|
| PATENT INFORMATION:   | US 2004132143   | A1   | 20040708      |
| APPLICATION INFO.:    | US 2003-642248  | A1   | 20030815 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2002-195908, filed on 15 Jul 2002, PENDING Continuation-in-part of Ser. No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat. No. US 6444447 Continuation-in-part of Ser. No. US 1999-283402, filed on 1 Apr 1999, ABANDONED Continuation-in-part of Ser. No. US 2001-842484, filed on 25 Apr 2001, PENDING Continuation-in-part of Ser. No. US 2002-142143, filed on 8 May 2002, PENDING |      |               |

|                       | NUMBER  | DATE          |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2002-404356P   | 20020816 (60) |
|                       | US 2003-479432P   | 20030618 (60) |
|                       | US 1998-107929P   | 19981111 (60) |
|                       | US 1998-80414P  | 19980402 (60) |
|                       | US 2000-199538P   | 20000425 (60) |
|                       | US 2001-289554P   | 20010508 (60) |
| DOCUMENT TYPE:        | Utility   |               |
| FILE SEGMENT:         | APPLICATION   |               |
| LEGAL REPRESENTATIVE: | DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113 |               |
| NUMBER OF CLAIMS:     | 111   |               |
| EXEMPLARY CLAIM:      | 1   |               |
| NUMBER OF DRAWINGS:   | 41 Drawing Page(s)  |               |
| LINE COUNT:           | 8221  |               |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate or chondroitin or heparin/heparosan synthases from Pasteurella, in order to create a variety of glycosaminoglycan oligosaccharides having a natural or chimeric or hybrid sugar structure with a targeted size that are substantially monodisperse in size.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 3 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2004:113659 USPATFULL  
 TITLE: Delivery of therapeutic biologicals from implantable tissue matrices  
 INVENTOR(S): MacLaughlin, David T., Saugus, MA, UNITED STATES  
 Vacanti, Joseph P., Winchester, MA, UNITED STATES  
 Donahoe, Patricia K., Boston, MA, UNITED STATES  
 Masiakos, Peter T., Boston, MA, UNITED STATES

|                       | NUMBER  | KIND | DATE          |
|-----------------------|---|------|---------------|
| PATENT INFORMATION:   | US 2004086497   | A1   | 20040506      |
| APPLICATION INFO.:    | US 2003-690077  | A1   | 20031021 (10) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 2001-770339, filed on 26 Jan 2001, GRANTED, Pat. No. US 6692738 |      |               |

|                       | NUMBER   | DATE          |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 2000-178842P  | 20000127 (60) |
| DOCUMENT TYPE:        | Utility  |               |
| FILE SEGMENT:         | APPLICATION  |               |
| LEGAL REPRESENTATIVE: | FROMMER LAWRENCE & HAUG, 745 FIFTH AVENUE- 10TH FL., NEW YORK, NY, 10151 |               |

NUMBER OF CLAIMS: 23  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 3 Drawing Page(s)  
LINE COUNT: 1458  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Normal cells, such as fibroblasts or other tissue or organ cell types, are genetically engineered to express biologically active, therapeutic agents, such as proteins that are normally produced in small amounts, for example, MIS, or other members of the TGF-beta family Herceptin.TM., interferons, and anti-angiogenic factors. These cells are seeded into a matrix for implantation into the patient to be treated. Cells may also be engineered to include a lethal gene, so that implanted cells can be destroyed once treatment is completed. Cells can be implanted in a variety of different matrices. In a preferred embodiment, these matrices are implantable and biodegradable over a period of time equal to or less than the expected period of treatment, when cells engraft to form a functional tissue producing the desired biologically active agent. Implantation may be ectopic or in some cases orthotopic. Representative cell types include tissue specific cells, progenitor cells, and stem cells. Matrices can be formed of synthetic or natural materials, by chemical coupling at the time of implantation, using standard techniques for formation of fibrous matrices from polymeric fibers, and using micromachining or microfabrication techniques. These devices and strategies are used as delivery systems via standard or minimally invasive implantation techniques for any number of parenterally deliverable recombinant proteins, particularly those that are difficult to produce in large amounts and/or active forms using conventional methods of purification, for the treatment of a variety of conditions that produce abnormal growth, including treatment of malignant and benign neoplasias, vascular malformations (hemangiomas), inflammatory conditions, keloid formation, abdominal or plural adhesions, endometriosis, congenital or endocrine abnormalities, and other conditions that can produce abnormal growth such as infection. Efficacy of treatment with the therapeutic biologicals is detected by determining specific criteria, for example, cessation of cell proliferation, regression of abnormal tissue, or cell death, or expression of genes or proteins reflecting the above.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 4 OF 30 USPATFULL on STN  
ACCESSION NUMBER: 2004:57008 USPATFULL  
TITLE: Delivery of bioactive compounds to an organism  
INVENTOR(S): Vandenberg, Herman H., Providence, RI, UNITED STATES  
PATENT ASSIGNEE(S): Cell Based Delivery (U.S. corporation)

|                       | NUMBER  | KIND | DATE          |
|-----------------------|---|------|---------------|
| PATENT INFORMATION:   | US 2004043010   | A1   | 20040304      |
| APPLICATION INFO.:    | US 2003-393143  | A1   | 20030320 (10) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1998-118950, filed on 17 Jul 1998, PENDING Continuation-in-part of Ser. No. US 1997-896152, filed on 17 Jul 1997, GRANTED, Pat. No. US 6503504 Continuation-in-part of Ser. No. US 1996-712111, filed on 13 Sep 1996, GRANTED, Pat. No. US 5869041 Continuation-in-part of Ser. No. US 1996-587376, filed on 12 Jan 1996, ABANDONED |      |               |

|                       | NUMBER        | DATE     |
|-----------------------|---------------|----------|
| PRIORITY INFORMATION: | WO 1997-US303 | 19970110 |
| DOCUMENT TYPE:        | Utility       |          |
| FILE SEGMENT:         | APPLICATION   |          |

LEGAL REPRESENTATIVE: PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111  
HUNTINGTON AVENUE, BOSTON, MA, 02199

NUMBER OF CLAIMS: 5  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 25 Drawing Page(s)  
LINE COUNT: 3939

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein is a method of delivering a bioactive compound to an organism that involves growing individual cells in vitro under conditions that allow the formation of an organized tissue, at least a subset of the cells containing a foreign DNA sequence which mediates the production of the bioactive compound; and implanting the organized tissue into the organism, whereby the bioactive compound is produced and delivered to the organism. Also disclosed herein is an in vitro method for producing a tissue having in vivo-like gross and cellular morphology that involves providing precursor cells of the tissue; mixing the cells with a solution of extracellular matrix components to create a suspension; placing the suspension in a vessel having a three dimensional geometry approximating the in vivo gross and cellular morphology of the tissue and having attachment surfaces coupled thereto; allowing the suspension to coalesce; and **culturing** the cells under conditions in which the cells form an organized tissue connected to the attachment surfaces. Also disclosed herein is an apparatus for producing in vitro a tissue having in vivo-like gross and cellular morphology. This apparatus includes a vessel having a three dimensional geometry approximating the in vivo morphology of the tissue and tissue attachment surfaces coupled thereto.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2004:24342 USPATFULL  
TITLE: Bioadhesive directed somatic cell therapy  
INVENTOR(S): Song, Sun Uk, Inchon, KOREA, REPUBLIC OF  
Yi, Youngsuk, Gaithersburg, MD, UNITED STATES  
Lee, Kwan Hee, Gaithersburg, MD, UNITED STATES  
Noh, Moon Jong, Gaithersburg, MD, UNITED STATES

|                     | NUMBER         | KIND | DATE          |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2004018179  | A1   | 20040129      |
| APPLICATION INFO.:  | US 2003-382190 | A1   | 20030305 (10) |

|                       | NUMBER  | DATE          |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2002-369111P                                   | 20020329 (60) |
| DOCUMENT TYPE:        | Utility   |               |
| FILE SEGMENT:         | APPLICATION                                       |               |
| LEGAL REPRESENTATIVE: | JHK Law, P.O. Box 1078, La Canada, CA, 91012-1078 |               |
| NUMBER OF CLAIMS:     | 40  |               |
| EXEMPLARY CLAIM:      | 1   |               |
| NUMBER OF DRAWINGS:   | 17 Drawing Page(s)                                |               |
| LINE COUNT:           | 1566  |               |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention is related to a cell-mediated gene therapy treatment using a cell composition that includes bioadhesive material. The bioadhesive material allows targeted and localized delivery of therapeutic somatic cells to the site of interest.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 6 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2004:7062 USPATFULL

TITLE: System and method for treating cardiac arrhythmias with fibroblast cells

INVENTOR(S): Lee, Randall J., Hillsborough, CA, UNITED STATES  
Maciejewski, Mark J., Edina, MN, UNITED STATES

PATENT ASSIGNEE(S): THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (U.S. corporation)  
RHYTHM THERAPEUTICS CORPORATION (U.S. corporation)

|                       | NUMBER   | KIND | DATE          |
|-----------------------|--|------|---------------|
| PATENT INFORMATION:   | US 2004005295  | A1   | 20040108      |
| APPLICATION INFO.:    | US 2003-435714   | A1   | 20030507 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2002-329295, filed on 23 Dec 2002, PENDING |      |               |

|                       | NUMBER   | DATE          |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 2002-379140P  | 20020508 (60) |
|                       | US 2002-426058P  | 20021113 (60) |
| DOCUMENT TYPE:        | Utility  |               |
| FILE SEGMENT:         | APPLICATION  |               |
| LEGAL REPRESENTATIVE: | JOHN P. O'BANION, O'BANION & RITCHEY LLP, 400 CAPITOL MALL SUITE 1550, SACRAMENTO, CA, 95814 |               |
| NUMBER OF CLAIMS:     | 52   |               |
| EXEMPLARY CLAIM:      | 1  |               |
| NUMBER OF DRAWINGS:   | 19 Drawing Page(s)   |               |
| LINE COUNT:           | 2294   |               |

AB A system delivers fibroblasts to a region of cardiac tissue at a location associated with a cardiac arrhythmia in a patient to form a conduction block in the region. A cardiac delivery system is coupled to a source the fibroblasts and delivers the fibroblasts to the location to form a conduction block. Substantial cardiac ablation is thus avoided. A contact member is shaped to correspond with a patterned region of tissue for delivering the fibroblasts along the pattern, such as linear, curvilinear, or circumferential patterns as required for treating particular arrhythmias. A pulmonary vein isolation assembly has an expandable or loop-shaped member cooperating with a needle array that delivers the fibroblast cells into a circumferential region of tissue engaged by the expandable member where a pulmonary vein extends from an atrium. Methods include providing the fibroblast cells as autologous cells in an **injectable** preparation.

L5 ANSWER 7 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2004:2717 USPATFULL

TITLE: System and method for forming a non-ablative cardiac conduction block

INVENTOR(S): Lee, Randall J., Hillsborough, CA, UNITED STATES

PATENT ASSIGNEE(S): THE REGENTS OF THE UNIVERSITY OF CALIFORNIA (U.S. corporation)

|                       | NUMBER  | KIND | DATE          |
|-----------------------|---|------|---------------|
| PATENT INFORMATION:   | US 2004002740   | A1   | 20040101      |
| APPLICATION INFO.:    | US 2003-434419  | A1   | 20030507 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2002-329295, filed on 23 Dec 2002, PENDING Continuation-in-part of Ser. No. US 2003-349323, filed on 21 Jan 2003, PENDING |      |               |

|                       | NUMBER          | DATE          |
|-----------------------|-----------------|---------------|
| PRIORITY INFORMATION: | US 2002-429914P | 20021129 (60) |
|                       | US 2002-431287P | 20021206 (60) |



US 2002-379140P 20020508 (60)  
US 2002-426058P 20021113 (60)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: JOHN P. O'BANION, O'BANION & RITCHEY LLP, 400 CAPITOL  
MALL SUITE 1550, SACRAMENTO, CA, 95814  
NUMBER OF CLAIMS: 96  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 19 Drawing Page(s)  
LINE COUNT: 2718

AB A system forms a conduction block in a regions of cardiac tissue at a location associated with a cardiac arrhythmia by delivering a material that is non-ablative into the region. The material include living cells that do not form sufficient gap-junctions with cardiomyocytes to conduct, e.g. myoblasts, stem cells, or fibroblasts. The material may be a non-living agent, such as a polymer agent, e.g. fibrin glue agent or collagen agent. The material may be a combination of living and non-living material that enhances the cellular conduction block. A contact member delivers the material over a patterned region of tissue, such as arcuate, linear, or circumferential patterns. The contact member may include an expandable member or balloon. A guidewire may be used for delivery. Cells used may be autologous, prepared for **injection** with a kit. Conduction blocks are thus formed without substantially ablating cardiac tissue in the region.

L5 ANSWER 8 OF 30 USPATFULL on STN  
ACCESSION NUMBER: 2003:276671 USPATFULL  
TITLE: Methods of producing a library and methods of selecting polynucleotides of interest  
INVENTOR(S): Zauderer, Maurice, Pittsford, NY, UNITED STATES  
Smith, Ernest S., Ontario, NY, UNITED STATES  
PATENT ASSIGNEE(S): University of Rochester (U.S. corporation)

|                       | NUMBER   | KIND | DATE          |
|-----------------------|--|------|---------------|
| PATENT INFORMATION:   | US 2003194696  | A1   | 20031016      |
| APPLICATION INFO.:    | US 2002-277161   | A1   | 20021022 (10) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2001-818991, filed on 28 Mar 2001, PENDING |      |               |

|  | NUMBER   | DATE          |
|--|--|---------------|
| PRIORITY INFORMATION:                      | US 2000-192586P  | 20000328 (60) |
|  | US 2000-203343P  | 20000510 (60) |
|  | US 2001-263226P  | 20010123 (60) |
|  | US 2001-271426P  | 20010227 (60) |
| DOCUMENT TYPE:                             | Utility  |               |
| FILE SEGMENT:                              | APPLICATION  |               |
| LEGAL REPRESENTATIVE:                      | STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934 |               |
| NUMBER OF CLAIMS:                          | 30   |               |
| EXEMPLARY CLAIM:                           | 1  |               |
| NUMBER OF DRAWINGS:                        | 34 Drawing Page(s)   |               |
| LINE COUNT:                                | 11239  |               |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. |  |               |

AB The present invention relates to a high efficiency method of introducing DNA into linear DNA viruses such as poxvirus, a method of producing libraries in linear DNA viruses such as poxvirus, and methods of selecting or screening for polynucleotides of interest based on cell nonviability or other phenotypes of eukaryotic cells, especially mammalian cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 9 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2003:264795 USPATFULL  
TITLE: Mixed-cell gene therapy  
INVENTOR(S): Song, Sun Uk, Inchon, KOREA, REPUBLIC OF  
Yi, Youngsuk, Gaithersburg, MD, UNITED STATES  
Lee, Kwan Hee, Gaithersburg, MD, UNITED STATES  
Noh, Moon Jong, Gaithersburg, MD, UNITED STATES

|                     | NUMBER         | KIND | DATE          |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2003185809  | A1   | 20031002      |
| APPLICATION INFO.:  | US 2003-382137 | A1   | 20030305 (10) |

|                       | NUMBER  | DATE          |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2002-369162P                                   | 20020329 (60) |
| DOCUMENT TYPE:        | Utility   |               |
| FILE SEGMENT:         | APPLICATION                                       |               |
| LEGAL REPRESENTATIVE: | JHK Law, P.O. Box 1078, La Canada, CA, 91012-1078 |               |
| NUMBER OF CLAIMS:     | 38  |               |
| EXEMPLARY CLAIM:      | 1   |               |
| NUMBER OF DRAWINGS:   | 8 Drawing Page(s)                                 |               |
| LINE COUNT:           | 1306  |               |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention is directed to a mixed cell composition to generate a therapeutic protein at a target site by providing a first population of mammalian cells transfected or transduced with a gene that is sought to be expressed, and a second population of mammalian cells that have not been transfected or transduced with the gene, wherein endogenously existing forms of the second population of mammalian cells are decreased at the target site, and wherein generation of the therapeutic protein by the first population of mammalian cells at the target site stimulates the second population cells to induce a therapeutic effect.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 10 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2003:176167 USPATFULL  
TITLE: Non-viable keratinocyte cell composition or lysate for promoting **wound healing**  
INVENTOR(S): Van Bossuyt, Hans, Relegem, BELGIUM  
PATENT ASSIGNEE(S): N. V. Innogenetics S.A., BELGIUM (non-U.S. corporation)

|                       | NUMBER  | KIND | DATE         |
|-----------------------|---|------|--------------|
| PATENT INFORMATION:   | US 6585969  | B1   | 20030701     |
| APPLICATION INFO.:    | US 1999-243333  |      | 19990201 (9) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1997-778031, filed on 2 Jan 1997, now patented, Pat. No. US 5866167<br>Division of Ser. No. US 1994-244177, filed on 22 Aug 1994, now patented, Pat. No. US 6126935 |      |              |

|                       | NUMBER                | DATE     |
|-----------------------|-----------------------|----------|
| PRIORITY INFORMATION: | GB 1991-403137        | 19911120 |
|                       | WO 1992-EP2657        | 19921119 |
| DOCUMENT TYPE:        | Utility               |          |
| FILE SEGMENT:         | GRANTED               |          |
| PRIMARY EXAMINER:     | Naff, David M.        |          |
| LEGAL REPRESENTATIVE: | Merchant & Gould P.C. |          |

NUMBER OF CLAIMS: 27  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)  
LINE COUNT: 1727

AB **Cultures** of keratinocyte cells are provided which are free from nonautologous fibroblasts and organ extracts, and which have a high speed of cell amplification for a minimum seeding density. The **cultures** can be cryopreserved in a buffered isotonic medium containing serum and a cryoprotectant. The **cultures** are produced by a process that does not involve the use of a feeder layer and organ extracts. A **culture** medium which can be used contains Medium 199, serum, epidermal growth factor, cholera toxin and/or hydrocortisone, and optionally insulin. A substance for **wound healing** and for cosmetic applications is derived from **cultured** human keratinocytes. A non-viable total keratinocyte lysate for use in promoting **wound healing** is produced by growing keratinocyte cells on a support, detaching the cells from the support, and lysing the detached cells to obtain the lysate which may be frozen and lyophilized. The cells may be grown without using a support to produce the lysate, or to produce a non-viable keratinocyte cell **culture** lyophilisate or spray dried non-viable keratinocyte cell composition for use in **healing** wounds.

L5 ANSWER 11 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2003:133458 USPATFULL

TITLE: Therapeutic cell preparation grafts and methods of use thereof

INVENTOR(S): Klein, Matthew B., Los Altos, CA, UNITED STATES  
Cuono, Charles B., Chandler, AZ, UNITED STATES

|                     | NUMBER        | KIND | DATE          |
|---------------------|---------------|------|---------------|
| PATENT INFORMATION: | US 2003091543 | A1   | 20030515      |
| APPLICATION INFO.:  | US 2002-44004 | A1   | 20020111 (10) |

|                       | NUMBER   | DATE     |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | US 2001-24057001   | 20011026 |
| DOCUMENT TYPE:        | Utility  |          |
| FILE SEGMENT:         | APPLICATION  |          |
| LEGAL REPRESENTATIVE: | MINTZ LEVIN COHN FERRIS GLOVSKY & POPEO, 666 THIRD AVENUE, NEW YORK, NY, 10017 |          |

NUMBER OF CLAIMS: 54  
EXEMPLARY CLAIM: 1  
LINE COUNT: 1636

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A biological preparation including genetically modified cells together with biocompatible matrices and methods of use thereof are provided. The biological preparation is useful in treating a subject at risk for or suffering from a disease in a controllable dosage and time-dependent manner, and for in vitro and in vivo screening of candidate drug therapies

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2003:30210 USPATFULL

TITLE: Methods of producing a library and methods of selecting polynucleotides of interest

INVENTOR(S): Zauderer, Maurice, Pittsford, NY, UNITED STATES  
Smith, Ernest S., Ontario, NY, UNITED STATES

PATENT ASSIGNEE(S): University of Rochester (U.S. corporation)

|                     | NUMBER         | KIND | DATE         |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 2003022157  | A1   | 20030130     |
| APPLICATION INFO.:  | US 2001-818991 | A1   | 20010328 (9) |

|                       | NUMBER          | DATE          |
|-----------------------|-----------------|---------------|
| PRIORITY INFORMATION: | US 2000-192586P | 20000328 (60) |
|                       | US 2000-203343P | 20000510 (60) |
|                       | US 2001-263226P | 20010123 (60) |
|                       | US 2001-271426P | 20010227 (60) |

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934  
NUMBER OF CLAIMS: 137  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 31 Drawing Page(s)  
LINE COUNT: 10535

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a high efficiency method of introducing DNA into linear DNA viruses such as poxvirus, a method of producing libraries in linear DNA viruses such as poxvirus, and methods of selecting polynucleotides of interest based on cell nonviability or other phenotypes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 13 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2003:4453 USPATFULL  
TITLE: Method and apparatus for the photomodulation of living cells  
INVENTOR(S): McDaniel, David H., Virginia Beach, VA, UNITED STATES

|                       | NUMBER   | KIND | DATE         |
|-----------------------|--|------|--------------|
| PATENT INFORMATION:   | US 2003004499  | A1   | 20030102     |
|                       | US 6663659   | B2   | 20031216     |
| APPLICATION INFO.:    | US 2001-894899   | A1   | 20010629 (9) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 2001-759094, filed on 12 Jan 2001, PENDING |      |              |

|                       | NUMBER  | DATE          |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2000-176175P   | 20000113 (60) |
| DOCUMENT TYPE:        | Utility   |               |
| FILE SEGMENT:         | APPLICATION   |               |
| LEGAL REPRESENTATIVE: | Wayne C. Jaeschke, Jr., Morrison & Foerster LLP, Suite 5500, 2000 Pennsylvania Avenue, N.W., Washington, DC, 20006-1888 |               |
| NUMBER OF CLAIMS:     | 31  |               |
| EXEMPLARY CLAIM:      | 1   |               |
| NUMBER OF DRAWINGS:   | 32 Drawing Page(s)  |               |
| LINE COUNT:           | 1819  |               |

AB The present invention relates to a system and method for the photomodulation of living tissue. When photomodulated, living tissue will exhibit bioactivation or bioinhibition according to the present invention and, when using the disclosed sources of narrowband multichromatic radiation can cause significant dermatologic advantages such as hair removal, hair growth stimulation, wrinkle reduction, acne reduction and scar removal, vitiligo, etc. The present invention has

application to non-dermatological medical treatments including tumor growth inhibition, cell regeneration, the stimulation of tissue in organs, etc.

L5 ANSWER 14 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2002:303586 USPATFULL

TITLE: Biological material for the repair of connective tissue defects comprising mesenchymal stem cells and hyaluronic acid derivative

INVENTOR(S): Abatangelo, Giovanni, Via Pelosa 32, 35030 Saccolongo (Prov. of Padova), ITALY  
Callegaro, Lanfranco, Via Monte Grappa 6, 35016 Thiene (Prov. of Vicenza), ITALY  
Young, Randell G., 8418 West Grove Rd., Ellicott City, MD, United States 21043  
Murphy, Josephine Mary, 2510 Pickwick Rd., Baltimore, MD, United States 21207  
Fink, David Jordan, 303 Wendover Rd., Baltimore, MD, United States 21218  
Bruder, Scott Philip, 3698 Ashley Way, Owings Mills, MD, United States 21117  
Barry, Francis Peter, 2510 Pickwick Rd., Baltimore, MD, United States 21207  
Kadiyala, Sudhakar, 1531 Lancaster St., Baltimore, MD, United States 21231  
Caplan, Arnold I., 1300 Oakridge Dr., Cleveland Heights, OH, United States 44121  
Moskowitz, Roland, 2846 Montgomery Rd., Shaker Heights, OH, United States 44122  
Yoo, Jung U., 16301 Shaker Blvd., Shaker Heights, OH, United States 44122  
Solchaga, Luis A., 2260 Barrington Rd., University Heights, OH, United States 44118

|                       | NUMBER   | KIND | DATE         |
|-----------------------|--|------|--------------|
| PATENT INFORMATION:   | US 6482231   | B1   | 20021119     |
| APPLICATION INFO.:    | US 2000-602033   |      | 20000623 (9) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1998-39200, filed on 13 Mar 1998, now abandoned Continuation-in-part of Ser. No. US 1998-41287, filed on 12 Mar 1998 Continuation-in-part of Ser. No. WO 1996-EP5093, filed on 19 Nov 1996 |      |              |

|  | NUMBER                                   | DATE     |
|--|--|----------|
| PRIORITY INFORMATION:                      | IT 1995-PD225                            | 19951120 |
| DOCUMENT TYPE:                             | Utility                                  |          |
| FILE SEGMENT:                              | GRANTED                                  |          |
| PRIMARY EXAMINER:                          | Isabella, David J.                       |          |
| LEGAL REPRESENTATIVE:                      | Hedman & Costigan, P.C.                  |          |
| NUMBER OF CLAIMS:                          | 16                                       |          |
| EXEMPLARY CLAIM:                           | 1  |          |
| NUMBER OF DRAWINGS:                        | 39 Drawing Figure(s); 34 Drawing Page(s) |          |
| LINE COUNT:                                | 1013                                     |          |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. |  |          |

AB A biological material for the repair of connective tissue cells comprising:

- a) a cell preparation enriched in mesenchymal stem cells,
- b) three-dimensional extracellular matrix comprising a hyaluronic acid derivative.

The use of said biological material, optionally combined with therapeutically acceptable excipients and/or diluents and optionally in association with therapeutically effective ingredients in the repair of connective tissue cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 15 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2002:158078 USPATFULL  
TITLE: Artificial skin  
INVENTOR(S): van Blitterswijk, C. A., Hekendorp, NETHERLANDS  
van Dorp, Annette G. M., Alphen 'a/d Rijn, NETHERLANDS  
Ponec, M., Leiderdorp, NETHERLANDS  
Riesle, J. U., Amsterdam, NETHERLANDS  
PATENT ASSIGNEE(S): IsoTis N.V., Bilthoven, NETHERLANDS (non-U.S. corporation)

|                       | NUMBER   | KIND | DATE          |
|-----------------------|--|------|---------------|
| PATENT INFORMATION:   | US 2002082692  | A1   | 20020627      |
| APPLICATION INFO.:    | US 2001-24360  | A1   | 20011213 (10) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1999-451520, filed on 30 Nov 1999, PENDING |      |               |

|                       | NUMBER   | DATE     |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | EP 1998-204031   | 19981130 |
|                       | EP 1998-204203   | 19981211 |
| DOCUMENT TYPE:        | Utility  |          |
| FILE SEGMENT:         | APPLICATION  |          |
| LEGAL REPRESENTATIVE: | BANNER & WITCOFF, LTD., 28 STATE STREET, 28th FLOOR, BOSTON, MA, 02109 |          |
| NUMBER OF CLAIMS:     | 24   |          |
| EXEMPLARY CLAIM:      | 1  |          |
| LINE COUNT:           | 767  |          |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to an artificial skin based on a copolymer of a polyalkylene glycol and an aromatic polyester, which skin has a thickness between 50 and 2000  $\mu$ m, and which skin has an upper and a lower side, both having a macroporosity between 10% and 95%.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 16 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2002:101824 USPATFULL  
TITLE: Artificial skin  
INVENTOR(S): van Blitterswijk, C. A., Hekendorp, NETHERLANDS  
van Dorp, Annette G. M., Rijn, NETHERLANDS  
Ponec, M., Leiderdorp, NETHERLANDS  
Riesle, J. U., Amsterdam, NETHERLANDS  
PATENT ASSIGNEE(S): IsoTis N.V., Bilthoven, NETHERLANDS (non-U.S. corporation)

|                     | NUMBER         | KIND | DATE         |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 6383220     | B1   | 20020507     |
| APPLICATION INFO.:  | US 1999-451520 |      | 19991130 (9) |

|                       | NUMBER         | DATE     |
|-----------------------|----------------|----------|
| PRIORITY INFORMATION: | EP 1998-204031 | 19981130 |
|                       | EP 1998-204203 | 19981211 |

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: McDermott, Corrine  
ASSISTANT EXAMINER: Barrett, Thomas  
LEGAL REPRESENTATIVE: Banner & Witcoff, Ltd.  
NUMBER OF CLAIMS: 72  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)  
LINE COUNT: 898

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to an artificial skin based on a copolymer of a polyalkylene glycol and an aromatic polyester, which skin has a thickness between 50 and 2000  $\mu\text{m}$ , and which skin has an upper and a lower side, both having a macroporosity between 10% and 95%.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 17 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2002:66628 USPATFULL  
TITLE: DELIVERY OF BIOACTIVE COMPOUNDS TO AN ORGANISM  
INVENTOR(S): VANDENBURGH, HERMAN H., PROVIDENCE, RI, UNITED STATES

|                       | NUMBER   | KIND | DATE         |
|-----------------------|--|------|--------------|
| PATENT INFORMATION:   | US 2002037279  | A1   | 20020328     |
| APPLICATION INFO.:    | US 1998-118950   | A1   | 19980717 (9) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. US 1997-896152, filed on 17 Jul 1997, PENDING Continuation-in-part of Ser. No. US 1996-712111, filed on 13 Sep 1996, GRANTED, Pat. No. US 5869041 |      |              |

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: NIXON PEABODY LLP, ATTENTION: DAVID RESNICK, 101 FEDERAL STREET, BOSTON, MA, 02110  
NUMBER OF CLAIMS: 15  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 25 Drawing Page(s)  
LINE COUNT: 3958

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed herein is a method of delivering a bioactive compound to an organism that involves growing individual cells in vitro under conditions that allow the formation of an organized tissue, at least a subset of the cells containing a foreign DNA sequence which mediates the production of the bioactive compound; and implanting the organized tissue into the organism, whereby the bioactive compound is produced and delivered to the organism. Also disclosed herein is an in vitro method for producing a tissue having in vivo-like gross and cellular morphology that involves providing precursor cells of the tissue; mixing the cells with a solution of extracellular matrix components to create a suspension; placing the suspension in a vessel having a three dimensional geometry approximating the in vivo gross and cellular morphology of the tissue and having attachment surfaces coupled thereto; allowing the suspension to coalesce; and **culturing** the cells under conditions in which the cells form an organized tissue connected to the attachment surfaces. Also disclosed herein is an apparatus for producing in vitro a tissue having in vivo-like gross and cellular morphology. This apparatus includes a vessel having a three dimensional geometry approximating the in vivo morphology of the tissue and tissue attachment surfaces coupled thereto.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 18 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2002:54341 USPATFULL  
 TITLE: Delivery of therapeutic biologicals from implantable tissue matrices  
 INVENTOR(S): MacLaughlin, David T., Saugus, MA, UNITED STATES  
 Vacanti, Joseph P., Winchester, MA, UNITED STATES  
 Donahoe, Patricia K., Boston, MA, UNITED STATES  
 Masiakos, Peter T., Boston, MA, UNITED STATES

|                     | NUMBER         | KIND | DATE         |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 2002031500  | A1   | 20020314     |
|                     | US 6692738     | B2   | 20040217     |
| APPLICATION INFO.:  | US 2001-770339 | A1   | 20010126 (9) |

|                       | NUMBER   | DATE          |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 2000-178842P  | 20000127 (60) |
| DOCUMENT TYPE:        | Utility  |               |
| FILE SEGMENT:         | APPLICATION  |               |
| LEGAL REPRESENTATIVE: | Patrea L. Pabst, Arnall Golden & Gregory, LLP, 2800 One Atlantic Center, 1201 West Peachtree Street, Atlanta, GA, 30309-3450 |               |
| NUMBER OF CLAIMS:     | 23   |               |
| EXEMPLARY CLAIM:      | 1  |               |
| NUMBER OF DRAWINGS:   | 3 Drawing Page(s)  |               |
| LINE COUNT:           | 1457   |               |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Normal cells, such as fibroblasts or other tissue or organ cell types, are genetically engineered to express biologically active, therapeutic agents, such as proteins that are normally produced in small amounts, for example, MIS, or other members of the TGF-beta family Herceptin.TM., interferons, and anti-angiogenic factors. These cells are seeded into a matrix for implantation into the patient to be treated. Cells may also be engineered to include a lethal gene, so that implanted cells can be destroyed once treatment is completed. Cells can be implanted in a variety of different matrices. In a preferred embodiment, these matrices are implantable and biodegradable over a period of time equal to or less than the expected period of treatment, when cells engraft to form a functional tissue producing the desired biologically active agent. Implantation may be ectopic or in some cases orthotopic. Representative cell types include tissue specific cells, progenitor cells, and stem cells. Matrices can be formed of synthetic or natural materials, by chemical coupling at the time of implantation, using standard techniques for formation of fibrous matrices from polymeric fibers, and using micromachining or microfabrication techniques. These devices and strategies are used as delivery systems via standard or minimally invasive implantation techniques for any number of parenterally deliverable recombinant proteins, particularly those that are difficult to produce in large amounts and/or active forms using conventional methods of purification, for the treatment of a variety of conditions that produce abnormal growth, including treatment of malignant and benign neoplasias, vascular malformations (hemangiomas), inflammatory conditions, keloid formation, abdominal or plural adhesions, endometriosis, congenital or endocrine abnormalities, and other conditions that can produce abnormal growth such as infection. Efficacy of treatment with the therapeutic biologicals is detected by determining specific criteria, for example, cessation of cell proliferation, regression of abnormal tissue, or cell death, or expression of genes or proteins reflecting the above.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.



ACCESSION NUMBER: 2001:223701 USPATFULL  
TITLE: SKIN EQUIVALENT AND METHODS OF FORMING AND USING SAME  
INVENTOR(S): HOEFFLER, WARREN, SAN CARLOS, CA, United States  
NELSON, CHARLOTTE F., SUISUN, CA, United States  
WANG, CHIAOYIN KATHY, PALO ALTO, CA, United States

|                       | NUMBER   | KIND | DATE         |
|-----------------------|--|------|--------------|
| PATENT INFORMATION:   | US 2001048917  | A1   | 20011206     |
| APPLICATION INFO.:    | US 1998-37191  | A1   | 19980309 (9) |
| DOCUMENT TYPE:        | Utility  |      |              |
| FILE SEGMENT:         | APPLICATION  |      |              |
| LEGAL REPRESENTATIVE: | FLEHR HOHBACH TEST, ALBRITTON & HERBERT LLP, SUITE 3400<br>FOUR EMBARCADERO CENTER, SAN FRANCISCO, CA, 94111 |      |              |
| NUMBER OF CLAIMS:     | 30   |      |              |
| EXEMPLARY CLAIM:      | 1  |      |              |
| NUMBER OF DRAWINGS:   | 7 Drawing Page(s)  |      |              |
| LINE COUNT:           | 1144   |      |              |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for the formation of a mammalian skin equivalent are described herein. The method comprises mixing keratinocytes and fibroblasts. The mammalian skin equivalent is also described. The skin equivalent can be made to be normal, abnormal or aging.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 20 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2001:202190 USPATFULL  
TITLE: Generating cartilage in a mammal using fibroblasts  
transfected with a vector encoding TGF- $\beta$ -1  
INVENTOR(S): Noh, Moon Jong, Kyunggi-Do, Korea, Republic of  
Kang, Kyoung Ae, Kyunggi-Do, Korea, Republic of  
Lee, Kwan Hee, Seoul, Korea, Republic of  
PATENT ASSIGNEE(S): TissueGene Co., Gaithersburg, MD, United States (U.S.  
corporation)

|                       | NUMBER   | KIND | DATE         |
|-----------------------|--|------|--------------|
| PATENT INFORMATION:   | US 6315992   | B1   | 20011113     |
| APPLICATION INFO.:    | US 1999-345415                                     |      | 19990630 (9) |
| DOCUMENT TYPE:        | Utility  |      |              |
| FILE SEGMENT:         | GRANTED  |      |              |
| PRIMARY EXAMINER:     | Clark, Deborah J. R.                               |      |              |
| ASSISTANT EXAMINER:   | Wilson, Michael C.                                 |      |              |
| LEGAL REPRESENTATIVE: | Squire, Sanders & Dempsey LLP., Kim, Joseph Hyosuk |      |              |
| NUMBER OF CLAIMS:     | 9  |      |              |
| EXEMPLARY CLAIM:      | 1  |      |              |
| NUMBER OF DRAWINGS:   | 24 Drawing Figure(s); 9 Drawing Page(s)            |      |              |
| LINE COUNT:           | 1136   |      |              |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention is related to a cell-mediated gene therapy treatment for orthopedic disease using a member belonging to the transforming growth factor- $\beta$  (TGF- $\beta$ ) superfamily. TGF- $\beta$  gene therapy as a new treatment method for degenerative arthritis is demonstrated. After transfection of TGF- $\beta$  cDNA expression vectors into fibroblasts (NIH 3T3-TGF- $\beta$ 1), the cells were **injected** into rabbit achilles tendon and knee joints with artificially-made cartilage defects. Intratendinous **injections** were performed to determine the optimal concentration for in vivo expression. Partially defected cartilage model was made to simulate degenerative arthritis of the knee joint. The partial cartilage defect treated with the cell-mediated gene therapy procedure was covered by newly formed hyaline cartilage which indicates that the cells survived and stimulated matrix

formation in this area. Completely denuded cartilage areas were covered by fibrous collagen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 21 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2000:131409 USPATFULL

TITLE: Pellets obtained from cell cultures of keratinocytes and their use in wound healing

INVENTOR(S): Van Bossuyt, Hans, Relegem, Belgium

PATENT ASSIGNEE(S): N.V. Innogenetics S.A., Belgium (non-U.S. corporation)

|                     | NUMBER         | KIND | DATE                     |
|---------------------|----------------|------|--------------------------|
| PATENT INFORMATION: | US 6126935     |      | 20001003                 |
|                     | WO 9310217     |      | 19930527                 |
| APPLICATION INFO.:  | US 1994-244177 |      | 19940822 (8)             |
|                     | WO 1992-EP2657 |      | 19921119                 |
|                     |                |      | 19940822 PCT 371 date    |
|                     |                |      | 19940822 PCT 102(e) date |

|                       | NUMBER                                 | DATE     |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | GB 1997-91403137                       | 19971120 |
| DOCUMENT TYPE:        | Utility                                |          |
| FILE SEGMENT:         | Granted                                |          |
| PRIMARY EXAMINER:     | Marx, Irene                            |          |
| LEGAL REPRESENTATIVE: | Merchant & Gould P.C.                  |          |
| NUMBER OF CLAIMS:     | 11                                     |          |
| EXEMPLARY CLAIM:      | 1                                      |          |
| NUMBER OF DRAWINGS:   | 3 Drawing Figure(s); 3 Drawing Page(s) |          |
| LINE COUNT:           | 1611                                   |          |

AB The present invention relates to a process for treating a skin surface wound of a human. The process includes topically applying a keratinocyte pellet fraction onto the wound to result in wound closure. The invention also relates to a pharmaceutical composition including a pharmaceutically acceptable vehicle and a keratinocyte pellet fraction. The keratinocyte pellet fraction can be produced in a sterile manner by growing a keratinocyte culture, lysing the keratinocytes, centrifugation, and recovering the keratinocyte pellet fraction.

L5 ANSWER 22 OF 30 USPATFULL on STN

ACCESSION NUMBER: 2000:1537 USPATFULL

TITLE: Fibrillin 1 gene comprising duplication mutation and compositions and kits using the same

INVENTOR(S): Siracusa, Linda D., Cherry Hill, NJ, United States

Jimenez, Sergio A., Philadelphia, PA, United States

PATENT ASSIGNEE(S): Thomas Jefferson University, Philadelphia, PA, United States (U.S. corporation)

|                     | NUMBER         | KIND | DATE         |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 6010694     |      | 20000104     |
| APPLICATION INFO.:  | US 1996-687967 |      | 19960726 (8) |

|                       | NUMBER        | DATE          |
|-----------------------|---------------|---------------|
| PRIORITY INFORMATION: | US 1995-1561P | 19950722 (60) |
| DOCUMENT TYPE:        | Utility       |               |
| FILE SEGMENT:         | Granted       |               |

PRIMARY EXAMINER: Stanton, Brian R.  
ASSISTANT EXAMINER: Clark, Deborah J. R.  
LEGAL REPRESENTATIVE: Woodcock Washburn Kurtz Mackiewicz & Norris LLP  
NUMBER OF CLAIMS: 11  
EXEMPLARY CLAIM: 1,4,7  
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 7 Drawing Page(s)  
LINE COUNT: 1351

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Human fibroblast cells that comprise a gene construct that comprises a duplication mutated fibrillin 1 gene operably linked to functional regulatory elements and compositions comprising such cells are disclosed. Methods of treating wounds and kits for practicing such methods are disclosed. Transgenic animals comprising a duplication mutated fibrillin 1 gene operably linked to a tissue specific and/or inducible promoter are disclosed. Methods of identifying individuals with a duplication mutated fibrillin 1 gene are disclosed. The methods comprises detecting a duplication of exons 17-40 of a fibrillin 1 gene or a gene product produced by expression of a duplication mutated fibrillin 1 gene. Methods of preventing expression of a duplication mutated fibrillin 1 gene are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 23 OF 30 USPATFULL on STN

ACCESSION NUMBER: 1999:15526 USPATFULL  
TITLE: Non-viable total keratinocyte lysate for promoting  
**wound healing**  
INVENTOR(S): Van Bossuyt, Hans, Relegem, Belgium  
PATENT ASSIGNEE(S): N.V Innogenetics S.A., Ghent, Belgium (non-U.S.  
corporation)

|                       | NUMBER  | KIND | DATE         |
|-----------------------|---|------|--------------|
| PATENT INFORMATION:   | US 5866167  |      | 19990202     |
| APPLICATION INFO.:    | US 1997-778031  |      | 19970102 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1994-244177, filed on 22 Aug 1994 |      |              |

|                       | NUMBER  | DATE     |
|-----------------------|---|----------|
| PRIORITY INFORMATION: | GB 1991-403137  | 19911120 |
|                       | WO 1992-EP2657  | 19921119 |
| DOCUMENT TYPE:        | Utility   |          |
| FILE SEGMENT:         | Granted   |          |
| PRIMARY EXAMINER:     | Naff, David M.  |          |
| LEGAL REPRESENTATIVE: | Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A. |          |
| NUMBER OF CLAIMS:     | 24  |          |
| EXEMPLARY CLAIM:      | 1   |          |
| NUMBER OF DRAWINGS:   | 3 Drawing Figure(s); 3 Drawing Page(s)                |          |
| LINE COUNT:           | 1621  |          |

AB **Cultures** of keratinocyte cells are provided which are free from nonautologous fibroblasts and organ extracts, and which have a high speed of cell amplification for a minimum seeding density. Preferably, a **culture** contains no more than about 10% autologous non-keratinocyte cells such as star-shaped, non-keratinocyte cells and no more than about 1% **autologous fibroblasts**. The **cultures** can be cryopreserved in a buffered isotonic medium containing serum and a cryoprotectant. The **cultures** are produced by a process that does not involve the use of a feeder layer and organ extracts. A **culture** medium used contains Medium 199, serum, epidermal growth factor, cholera toxin and/or hydrocortisone, and optionally insulin. A substance for **wound healing** and for cosmetic applications is derived from **cultured** human

keratinocytes. Lyophilized keratinocyte cell **cultures** or an extract therefrom is used to provide a pharmaceutical composition. Confluent and cohesive keratinocyte sheets are prepared for use in **wound healing**. A non-viable total keratinocyte lysate for use in promoting **wound healing** is produced by growing keratinocyte cells on a support, detaching the cells from the support, and lysing the detached cells to obtain the lysate. The lysate may be frozen and lyophilized. The detached cells may be frozen to produce the lysate without lysis before freezing.

L5 ANSWER 24 OF 30 USPATFULL on STN

ACCESSION NUMBER: 1998:64722 USPATFULL  
 TITLE: Method of grafting genetically modified cells to treat defects, disease or damage of the central nervous system  
 INVENTOR(S): Gage, Fred H., La Jolla, CA, United States  
 Schinstine, Malcolm, San Diego, CA, United States  
 Ray, Jasodhara, San Diego, CA, United States  
 Friedmann, Theodore, La Jolla, CA, United States  
 Kawaja, Michael D., Toronto, Canada  
 Rosenberg, Michael B., San Diego, CA, United States  
 Wolff, Jon A., Madison, WI, United States  
 PATENT ASSIGNEE(S): The Regents of the University of California, Oakland, CA, United States (U.S. corporation)

|                       | NUMBER  | KIND | DATE         |
|-----------------------|---|------|--------------|
| PATENT INFORMATION:   | US 5762926  |      | 19980609     |
| APPLICATION INFO.:    | US 1995-464397  |      | 19950605 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1994-209609, filed on 10 Mar 1994 which is a continuation of Ser. No. US 1991-792894, filed on 15 Nov 1991, now abandoned which is a continuation-in-part of Ser. No. US 1988-285196, filed on 15 Dec 1988, now patented, Pat. No. US 5082670 |      |              |
| DOCUMENT TYPE:        | Utility   |      |              |
| FILE SEGMENT:         | Granted   |      |              |
| PRIMARY EXAMINER:     | Chambers, Jasemine C.   |      |              |
| ASSISTANT EXAMINER:   | Hauda, Karen M.   |      |              |
| LEGAL REPRESENTATIVE: | Merchant, Gould, Smith, Edell, Welter & Schmidt   |      |              |
| NUMBER OF CLAIMS:     | 51  |      |              |
| EXEMPLARY CLAIM:      | 1   |      |              |
| NUMBER OF DRAWINGS:   | 134 Drawing Figure(s); 70 Drawing Page(s)   |      |              |
| LINE COUNT:           | 4865  |      |              |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods of genetically modifying donor cells by gene transfer for grafting into the central nervous system to treat defective, diseased or damaged cells are disclosed. The modified donor cells produce functional molecules that effect the recovery or improved function of cells in the CNS. Methods and vectors for carrying out gene transfer and grafting are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 25 OF 30 USPATFULL on STN

ACCESSION NUMBER: 97:63758 USPATFULL  
 TITLE: Method of grafting genetically modified cells to treat defects, disease or damage of the central nervous system  
 INVENTOR(S): Gage, Fred H., La Jolla, CA, United States  
 Friedmann, Theodore, La Jolla, CA, United States  
 Rosenberg, Michael B., San Diego, CA, United States  
 Wolff, Jon A., Madison, WI, United States

Schinstine, Malcolm, San Diego, CA, United States  
 Kawaja, Michael D., Toronto, Canada  
 Ray, Jasodhara, San Diego, CA, United States  
 PATENT ASSIGNEE(S): The Regents of the University of California, Oakland,  
 CA, United States (U.S. corporation)

|  | NUMBER  | KIND | DATE         |
|--|---|------|--------------|
| PATENT INFORMATION:                        | US 5650148  |      | 19970722     |
| APPLICATION INFO.:                         | US 1994-209609  |      | 19940310 (8) |
| RELATED APPLN. INFO.:                      | Continuation of Ser. No. US 1991-792894, filed on 15<br>Nov 1991, now abandoned which is a continuation-in-part<br>of Ser. No. US 1988-285196, filed on 15 Dec 1988, now<br>patented, Pat. No. US 5082670 |      |              |
| DOCUMENT TYPE:                             | Utility   |      |              |
| FILE SEGMENT:                              | Granted   |      |              |
| PRIMARY EXAMINER:                          | Chambers, Jasemine C.   |      |              |
| LEGAL REPRESENTATIVE:                      | Merchant, Gould, Smith, Edell, Welter and Schmidt   |      |              |
| NUMBER OF CLAIMS:                          | 74  |      |              |
| EXEMPLARY CLAIM:                           | 1   |      |              |
| NUMBER OF DRAWINGS:                        | 134 Drawing Figure(s); 70 Drawing Page(s)   |      |              |
| LINE COUNT:                                | 4924  |      |              |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. |   |      |              |

AB Methods of genetically modifying donor cells by gene transfer for  
 grafting into the central nervous system to treat defective, diseased or  
 damaged cells are disclosed. The modified donor cells produce functional  
 molecules that effect the recovery or improved function of cells in the  
 CNS. Methods and vectors for carrying out gene transfer and grafting are  
 described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 26 OF 30 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN

ACCESSION NUMBER: 1999:81676 EPFULL  
 UPDATE DATE PUBLICAT.: 20050120  
 DATA UPDATE DATE: 20050119  
 DATA UPDATE WEEK: 200503  
 TITLE (ENGLISH): Artificial skin  
 TITLE (FRENCH): Peau artificielle  
 TITLE (GERMAN): Kunsthaut  
 INVENTOR(S): van Blitterswijk, Clemens Antoni, Hekendorpse Buurt 2,  
 3467 PD Hekendorp, NL; Ponec, Maria, Sternstraat 5,  
 2352 EH Leiderdorp, NL; van Dorp, Anette Geertruida  
 Maria, Portugalstraat 22, 2408 CG Alphen a/d Rijn, NL;  
 Riesle, Jens Uwe, Gerard Doustraat 192, 1073 XA  
 Amsterdam, NL  
 PATENT APPLICANT(S): IsoTis N.V., Prof. Bronkhorstlaan 10, 3723 MB  
 Bilthoven, NL  
 PATENT APPL. NUMBER: 3145730  
 AGENT: Prins, Adrianus Willem, Mr. Ir., et al, Vereenigde,  
 Nieuwe Parklaan 97, 2587 BN Den Haag, NL  
 AGENT NUMBER: 20903  
 LANGUAGE OF FILING: English  
 LANGUAGE OF PUBL.: English  
 LANGUAGE OF PROCEDURE: English  
 LANGUAGE OF TITLE: German; English; French  
 DOCUMENT TYPE: Patent  
 PATENT INFO TYPE: EPB1 Granted patent  
 PATENT INFORMATION:

| NUMBER     | KIND | DATE     |
|------------|------|----------|
| EP 1005873 | B1   | 20030409 |

DESIGNATED STATES: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE  
 APPLICATION INFO.: EP 1999-204039 A 19991130  
 PRIORITY INFO.: EP 1998-204031 A 19981130  
 EP 1998-204203 A 19981211  
 CITED PATENT LIT.: EP 243132 A  
 EP 357155 A  
 EP 416702 A  
 WO 9321858 A  
 US 3908201 A  
 US 5639654 A

L5 ANSWER 27 OF 30 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN

ACCESSION NUMBER: 1999:38490 EPFULL  
 DATA UPDATE DATE: 20011205  
 DATA UPDATE WEEK: 200149  
 TITLE (ENGLISH): Pellets derived from keratinocytes for use as  
**wound healing** substances  
 TITLE (FRENCH): Granules derives de keratinocytes utilisables comme  
 agents pour le traitement de plaies  
 TITLE (GERMAN): Keratinozyt-abstammende Granulate zur Verwendung als  
 wundheilendes Mittel  
 INVENTOR(S): VAN BOSSUYT, Hans, Onderrichtstraat 11, B-1731 Relegem,  
 BE  
 PATENT APPLICANT(S): INNOGENETICS N.V., Industriepark Zwijnaarde 7, Box 4,  
 9052 Gent, BE  
 PATENT APPL. NUMBER: 713142  
 LANGUAGE OF FILING: English  
 LANGUAGE OF PUBL.: English  
 LANGUAGE OF PROCEDURE: English  
 LANGUAGE OF TITLE: German; English; French  
 DOCUMENT TYPE: Patent  
 PATENT INFO TYPE: EPA3 Separate publication of search report  
 PATENT INFORMATION:

| NUMBER    | KIND | DATE     |
|-----------|------|----------|
| EP 970701 | A3   | 20011205 |

DESIGNATED STATES: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL SE  
 APPLICATION INFO.: EP 1999-114054 A 19921119  
 RELATED DOC. INFO.: EP 1992-923745 19930606  
 EP 615545 Parent Application  
 PRIORITY INFO.: EP 1991-403137 A 19911120

L5 ANSWER 28 OF 30 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN

ACCESSION NUMBER: 1997:57315 EPFULL  
 UPDATE DATE PUBLICAT.: 20050104  
 DATA UPDATE DATE: 20041222  
 DATA UPDATE WEEK: 200452  
 TITLE (ENGLISH): A VECTOR FOR POLYNUCLEOTIDE VACCINES  
 TITLE (FRENCH): VECTEUR DESTINE A DES VACCINS POLYNUCLEOTIDIQUES  
 TITLE (GERMAN): VEKTOR FUER POLYNUKLEOTIDIMPFSTOFFE  
 INVENTOR(S): NELSON, Edward, L., 660 Buckhorn Road, Eldersburg, MD  
 21784, US; NELSON, Peter, J., Reutterstrasse 70,  
 D-80689 Munich, DE  
 PATENT APPLICANT(S): THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as  
 represented by THE SECRETARY, DEPARTMENT OF HEALTH AND  
 HUMAN SERVICES, (GOVERNMENT OF THE UNITED STATES OF  
 AMERICA, as represented by THE SECRETARY, DEPARTMENT OF  
 HEALTH AND HUMAN SERVICES, THE; THE SECRETARY,  
 DEPARTMENT OF HEALTH AND HUMAN SERVICES, THE GOVERNMENT  
 OF THE UNITED STATES OF AMERICA, as represented by;

HEALTH AND HUMAN SERVICES, THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF), The National Institute of Health, Office of Technology Transfer, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852, US 304191

PATENT APPL. NUMBER:  
AGENT:

Vossius, Volker, Dr., et al, Dr. Volker Vossius, Patentanwaltskanzlei - Rechtsanwaltskanzlei, Geibelstrasse 6, 81679 Muenchen, DE

AGENT NUMBER:

12524

LANGUAGE OF FILING:

English

LANGUAGE OF PUBL.:

English

LANGUAGE OF PROCEDURE:

English

LANGUAGE OF TITLE:

German; English; French

DOCUMENT TYPE:

Patent

PATENT INFO TYPE:

EPB1 Granted patent

PATENT INFORMATION:

PATENT INFORMATION:

| NUMBER | KIND | DATE |
|--------|------|------|
| NUMBER | KIND | DATE |

|           |    |          |
|-----------|----|----------|
| EP 920522 | B1 | 20031029 |
|-----------|----|----------|

|            |  |          |
|------------|--|----------|
| WO 9806863 |  | 19980219 |
|------------|--|----------|

DESIGNATED STATES:

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

APPLICATION INFO.:

|                |   |          |
|----------------|---|----------|
| EP 1997-937243 | A | 19970814 |
|----------------|---|----------|

|                 |   |          |
|-----------------|---|----------|
| WO 1997-US14306 | A | 19970814 |
|-----------------|---|----------|

PRIORITY INFO.:

|                |   |          |
|----------------|---|----------|
| US 1996-23931P | P | 19960814 |
|----------------|---|----------|

CITED NON PATENT LIT.:

COLOMA, M. JOSEFINA ET AL: "Novel vectors for the expression of antibody molecules using variable regions generated by polymerase chain reaction" J. IMMUNOL. METHODS (1992), 152(1), 89-104 CODEN: JIMMBG;ISSN: 0022-1759, 1992, XP000289684;

PETER J. NELSON ET AL.: "Genomic organization and transcriptional regulation of the RANTES chemokine gene" JOURNAL OF IMMUNOLOGY, vol. 151, no. 5, 1 September 1993, BALTIMORE US, pages 2601-2612, - XP002047102 cited in the application

CITED PATENT LIT.:

|            |   |
|------------|---|
| WO 9201055 | A |
| WO 9201307 | A |
| WO 9507347 | A |
| WO 9640987 | A |

L5 ANSWER 29 OF 30 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN

ACCESSION NUMBER:

1992:59902 EPFULL

DATA UPDATE DATE:

20000607

DATA UPDATE WEEK:

200023

TITLE (ENGLISH):

THERAPY OF CENTRAL NERVOUS SYSTEM BY GENETICALLY MODIFIED CELLS

TITLE (FRENCH):

THERAPIE DU SYSTEME NERVEUX CENTRAL A L'AIDE DE CELLULES MODIFIEES PAR GENIE GENETIQUE

TITLE (GERMAN):

THERAPIE DES ZENTRALNERVENSYSTEMS MIT GENETISCH MODIFIZIERTEN ZELLEN

INVENTOR(S):

GAGE, Fred, 8358 Caminito Helecho, La Jolla, CA 92037, US; FRIEDMANN, Theodore, 9470 La Jolla Shores Drive, La Jolla, CA 92037, US; ROSENBERG, Michael, B., 12688 Toreey Bluff Drive, No. 193, San Diego, CA 92130, US; WOLFF, Jon, A., 1122 University Bay Drive, Madison, WI 53705, US; SCHINSTINE, Malcolm, 12510 Caramel Creek Road Apt. 190, San Diego, CA 92130, US; KAWAJA, Michael, D., 1392 Brackenwood Crescent, Kingston Township, Ontario K7P 2W4, CA; RAY, Jasodhara, 4184

PATENT APPLICANT(S): Corte de la Siena, San Diego, CA 92130, US  
 THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, (REGENTS  
 OF THE UNIVERSITY OF CALIFORNIA, THE; UNIVERSITY OF  
 CALIFORNIA, THE REGENTS OF THE; CALIFORNIA, THE REGENTS  
 OF THE UNIVERSITY OF), 300 Lakeside Drive, 22nd Floor,  
 Oakland, California 94612-3550, US

PATENT APPL. NUMBER: 221072

AGENT: VOSSIUS & PARTNER, Postfach 86 07 67, 81634 Muenchen,  
 DE

AGENT NUMBER: 100311

LANGUAGE OF FILING: English

LANGUAGE OF PUBL.: English

LANGUAGE OF PROCEDURE: English

LANGUAGE OF TITLE: German; English; French

DOCUMENT TYPE: Patent

PATENT INFO TYPE: EPB1 Granted patent

PATENT INFORMATION:

| NUMBER | KIND | DATE |
|--------|------|------|
| NUMBER | KIND | DATE |

|           |    |          |
|-----------|----|----------|
| EP 625195 | B1 | 19990107 |
|-----------|----|----------|

|            |  |          |
|------------|--|----------|
| WO 9310234 |  | 19930527 |
|------------|--|----------|

DESIGNATED STATES: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL SE

APPLICATION INFO.: EP 1992-925278 A 19921113

WO 1992-US9896 A 19921113

PRIORITY INFO.: US 1991-792894 A 19911115

CITED NON PATENT LIT.: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF  
 USA. vol. 83, February 1986, WASHINGTON US pages 725 -  
 729 KHILLAN, J.S. ET AL. 'Developmental and  
 tissue-specific expression directed by the alpha 2 type  
 I collagen promoter in transgenic mice';  
 T. Palmer et al., Proc. Natl. Acad. Sci. USA, 88,  
 pp 1330-1334, 1991

CITED PATENT LIT.: EP 474979 A

WO 8902468 A

WO 9006757 A

WO 9209688 A

L5 ANSWER 30 OF 30 EPFULL COPYRIGHT 2005 EPO/FIZ KA on STN

ACCESSION NUMBER: 1992:58924 EPFULL

DATA UPDATE DATE: 20010509

DATA UPDATE WEEK: 200119

TITLE (ENGLISH): LYSATES DERIVED FROM KERATINOCYTES FOR USE AS

**WOUND HEALING** SUBSTANCES

TITLE (FRENCH): LYSATES DE KERATINOCYTES POUR UTILISATION COMME

SUBSTANCES DE CICATRISATION

TITLE (GERMAN): LYSATE VON KERATINOZYTEN ZUR VERWENDUNG ALS HEILMITTEL  
 FÜR WUNDEN.

INVENTOR(S): VAN BOSSUYT, Hans, Oudstrijdersstraat, 54 Bus 3,  
 B-1785 Merchtem, BE

PATENT APPLICANT(S): N.V. INNOGENETICS S.A., (INNOGENETICS S.A., N.V.),  
 Industriepark Zwijnaarde 7, Box 4, 9052 Gent, BE

PATENT APPL. NUMBER: 713141

LANGUAGE OF FILING: English

LANGUAGE OF PUBL.: English

LANGUAGE OF PROCEDURE: English

LANGUAGE OF TITLE: German; English; French

DOCUMENT TYPE: Patent

PATENT INFO TYPE: EPB1 Granted patent

PATENT INFORMATION:



## PATENT INFORMATION:

| NUMBER | KIND | DATE |
|--------|------|------|
| NUMBER | KIND | DATE |

|           |    |          |
|-----------|----|----------|
| EP 615545 | B1 | 20000517 |
|-----------|----|----------|

|            |  |          |
|------------|--|----------|
| WO 9310217 |  | 19930527 |
|------------|--|----------|

DESIGNATED STATES: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL SE

APPLICATION INFO.: EP 1992-923745 A 19921119

WO 1992-EP2657 A 19921119

RELATED DOC. INFO.: EP 1999-114054 19990720

EP 970701 Divisional Application

PRIORITY INFO.: EP 1991-403137 A 19911120

CITED NON PATENT LIT.: IN VITRO vol. 16, no. 6, June 1980, US pages 516 - 525 D.M. PEEHL ET AL. 'Growth and differentiation of human keratinocytes without a feeder layer or conditioned medium';

DATABASE WPIL Week 8947, Derwent Publications Ltd., London, GB; AN 89-344184 (47) & JP,A,1 256 380 (TERUMO CORP) 12 October 1989;

JOURNAL OF CELL BIOLOGY vol. 79, no. 2, November 1978, US pages 356 - 370 C.L. MARCELO ET AL.

'Stratification, specialization, and proliferation of primary keratinocyte cultures' cited in the application;

MAYO CLINIC PROCEEDINGS vol. 61, no. 10, October 1986, ROCHESTER, MINNESOTA, US pages 771 - 777 M.R. PITTELKOW ET AL. 'New techniques for the in vitro culture of human skin keratinocytes and perspectives on their use for grafting of patients with extensive burns' cited in the application;

EMBASE, EXCERPTA MEDICA, AMSTERDAM, NL. ABSTRACT NO 81021358 D.M. PEEHL ET AL. 'Clonal growth of human keratinocytes with small amounts of dialyzed serum' & IN VITRO 1980, vol. 16, no. 6, pages 526 - 538;

Medline abstract of EP90203033;

Medline abstract of EP90308337;

Medline abstract of EP87110818;

Duinslaeger et al. (1996), Plast. Reconstr. Surg., 98, p.110-116;

Somers et al. (1996), Acta Otolaryngol, 116, p.589-593

CITED PATENT LIT.:

EP 296475 A

EP 364306 A

EP 403139 A

US 4254226 A

US 4443546 A

US 4673649 A